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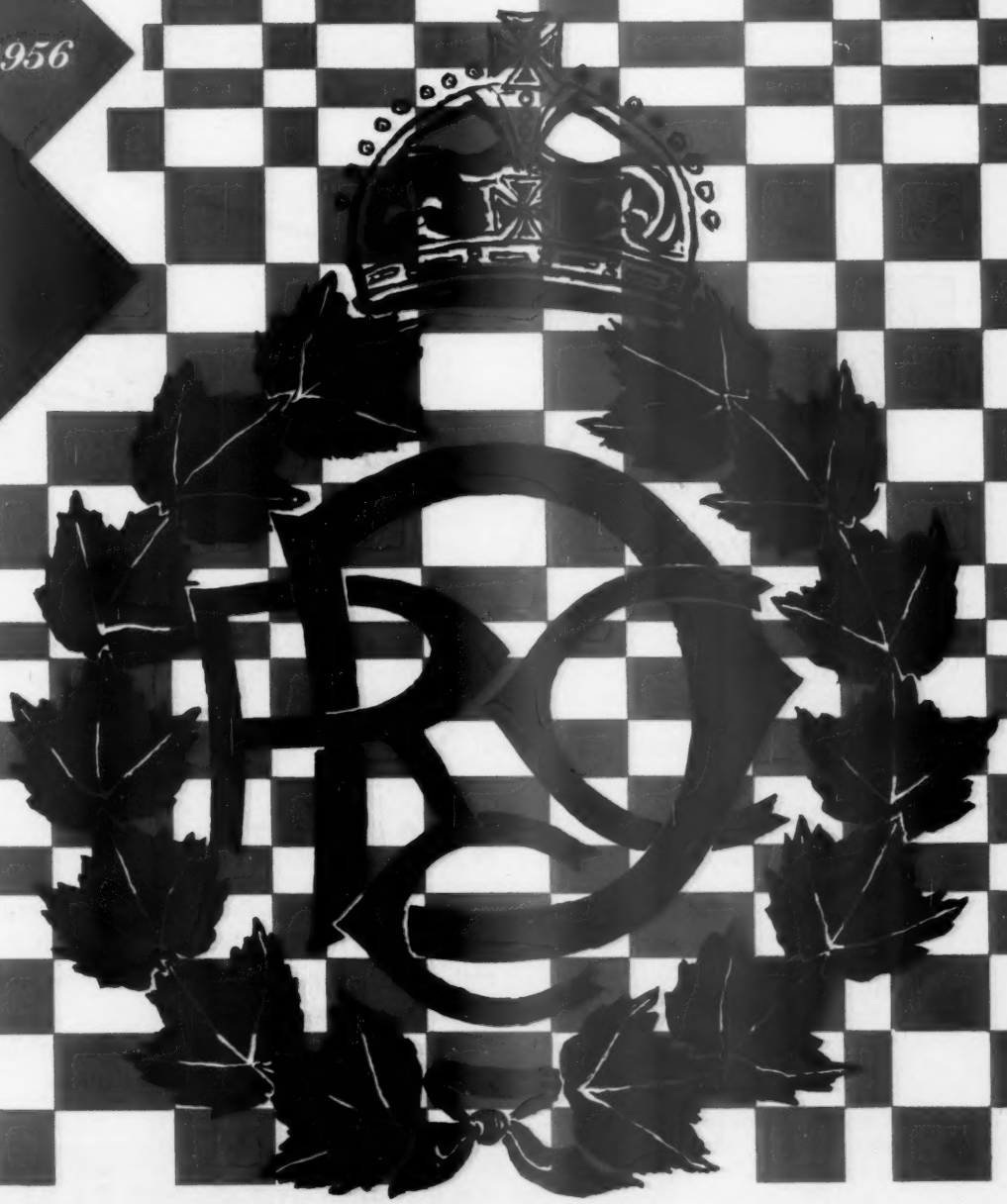

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A MAGAZINE FOR DENTISTS, DENTAL ASSISTANTS, AND DENTAL HYGIENISTS

July 1956 Vol. XV, No. 7


CONTENTS


IT'S YOUR MOVE, DOCTOR
If you intend to relocate your office, don't miss this expert guidance ..... 1

DANGER! FAT MAN AT WORK!
"... the fatter the man, the slimmer are his chances for a long and healthy life." ..... 3

RULES FOR DENTAL WIVES
"We recognize that there are certain things wives of dentists should and should not do." .... 5

AN ASSET TO YOUR PRACTICE
An experienced practitioner shows how a good dental laboratory can save you time and money ..... 6

KEEPING THOSE TEETH CLEAN
"Instructions for the care of teeth and gums must be individualized by the dentist after he has thoroughly examined his patient's mouth." ..... 8

BIOPSY
The seventh installment in TIC's outstanding series on Oral Cancer ..... 11

ANGLES AND IMPRESSIONS
Interpreting the cool, crazy "era of oral hygiene" ..... 13

PUBLIC HEALTH SERVICE DENTIST
Why every dentist has a professional stake in the programs being carried out by the Division of Dental Public Health, PHS. ..... 14



*Opinions expressed by contributors to TIC magazine do not necessarily reflect the views of the publishers.*



*Printed in U.S.A. by*
*Jersey Printing Co., Inc.*
*Bayonne, N. J.*

Cover artist, Edward Kasper


***Check and Double Check Because***

# It's Your Move, Doctor

**by Harold J. Ashe**

When a dentist moves his office from one location to another he may expose his practice to certain dangers and suffer certain losses not readily anticipated or easily guarded against. In transferring an office from one location to another, there is something more involved than physically shifting professional equipment, furnishings, supplies, and records to the new office.

Any dentist making a professional move should work out a plan well in advance of the contemplated moving date. He should carefully calculate every step and every action deemed necessary to reduce risks and losses to a bare minimum. Most, although not all, of the ensuing points will have significance for dentists about to move. Some will be qualified by the type of office from which a dentist is moving, i.e., combination office-residence, solely occupied separate office premises, or office in an office building. Thus, a dentist moving from an office-residence location or a building in which he was sole tenant might have special problems not shared by a dentist abandoning a suite of offices in an office building.

## The Expiring Lease

The lease about to end on the old office may need to be re-read critically. This agreement may reveal certain obligations on the part of a dentist which must be fulfilled on or before vacating the premises. Failing to do so may prove an expensive oversight. The cost of voluntary compliance while still in possession of the premises may be less. If the building has been altered materially to suit the dentist's professional needs he may have obligated himself to restore the premises to their original condition. If so, this is as binding on him as other lease conditions. He may have damaged the premises to such an extent this cannot be dismissed as normal wear and tear.

## Month-to-Month Occupancy

By arrangement with his landlord, a dentist may continue on at his old office for a time after the lease ends, pending getting possession of his new office. However, a dentist should learn the law of his state in respect to month-to-month tenancy. He may be required to give a 30-day notice prior to moving. After his de-

parture, a disgruntled landlord may demand an additional month's rent in lieu of a 30-day notice.

Be careful what is moved. A dentist may court trouble if he is too zealous in what he moves out of the old offices. Any improvements which he has made must remain with the building and surrounding land—if these improvements are physically attached to the structure or land. These will include such items as furnaces, hot water heaters, lighting fixtures, toilet facilities and even fences surrounding parking areas. In the early postwar years a good many dentists returning from service, and confronted with a shortage of offices, were obliged to take office space on an "as is" basis, making major improvements at their own expense. If there is any doubt about certain items, and a substantial value is involved, an attorney should be consulted *before* removal.

While not too commonly practiced, it is a wise dentist who leaves the old premises reasonably clean and free of litter. This should not be made the problem of a landlord or new tenant. Aside from being a good will gesture which costs little, it reduces the possibility of a fire originating because of the dentist's negligence. Oily rags, paper and other inflammables should be destroyed. All utilities, including water, should be shut off without fail. Gas outlets should be capped or plugged. All outside doors should be locked or bolted securely. Cartons and trash should not be left behind, least of all outside premises. Such discarded junk may serve as an "attractive nuisance" for children at play, and to their possible injury.

## Insurance Coverage

All insurance carriers, or their agents, should be notified prior to the physical move taking place. Insurance companies will issue "removal permits." This should not be neglected. Without such endorsement, fire and other policies on property are void if removed from the premises described in the policies. Moreover, either a higher or lower rate may prevail at the new location. A typical removal permit provides a removal period not exceeding 15 days "in old location, and while in transit to, and in new location, in that proportion which the value of said property in each location shall bear to the value in all locations, and thereafter shall cover only in the new location."

In moving to a newly constructed office or one requiring major alterations, a dentist should be prepared for possible delay in getting possession. The initial target date for moving should be well before expiration of the old lease. This will provide some moving leeway. In short, a dentist should not be caught in a squeeze play where he loses possession of the old premises before the new is ready for occupancy. It can happen. It can be costly in double moving charges, storage costs and shut-down of a practice for a period. This can be far more serious than loss of some rent at the end of the old lease—if the move is delayed.

## Loss of Patients

A good many patients may be lost by any move, unless every effort is made to eliminate causes. Even a move of a few blocks may result in losses. A dentist should do everything possible to *make it easy* for patients to locate him in his new quarters. Some patients are not going to exert themselves in this pursuit; others have slight loyalty which, however, should not be put to the test. Anything that disturbs a patient's habits and creates problems may be sufficient to cause him to look for another dentist—unfair though this may be. If possible, *patients should not be obliged to go to the old office first. This may put them closer to a new dentist than to the office of their regular dentist.* At the same time they may be irked by confronting a vacant office, particularly if, at this point, they get the new address which is nearer the start of the trip than the old office.

Here are a few things which should be done to reduce loss of patients:

Try to keep the same phone number, if possible.

Notify business and professional neighbors of the new office address so they may answer occasional inquiries.

Place a removal sign on the door of the old office giving the new address (this underscores the importance of leaving the former landlord in a good frame of mind and not offending a new tenant with excessive litter).

Before making the move display the new address on small dignified signs on waiting room tables and on the receptionist's desk.

Personally advise patients of the forthcoming move.

Insist that new office signs be installed not later than the earliest anticipated moving date.

In smaller communities at least issue a simple press release to newspapers stating the fact of the move, giving the new address.

Get new stationery, including statements, reflecting the new address.

Immediately before removal—and when moving date is definite—mail change-of-address announcements to all patients, and date of change.

Give the postman a change-of-address card. Advise all supply houses and salesmen. Finally, hope the sign at the old location will direct some patients to the new office—but don't count on it in lieu of more positive action. That sign may not stay there as long as hoped for.

P. O. Drawer 307
Beaumont, Calif.

# DANGER!

**by Maurice J. Teitelbaum, D.D.S.**

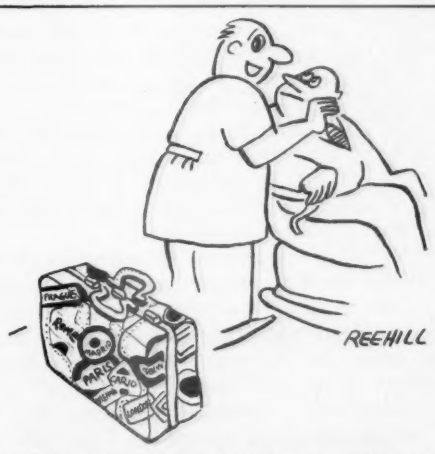
If you feel tired and sluggish and irritable, it may not be the late hours you've been keeping or those new shoes—but rather that spare tire of avoirdupois around your waistline. Being overweight can slow you down mentally and physically—especially if you are a dentist. For, whether you work in a sitting position or stand over your chair, the very nature of your work affords very little physical exercise while performing your daily duties. If you operate without the benefit of a stool, an added burden of twenty or thirty extra pounds puts a taxing load on the back, legs, and feet.

Five or six pounds over the weight computed according to an individual's height, age, and bony structure is not excessive poundage. Those five or six pounds will not endanger one's health and often prove to be beneficial as a reserve in case of sudden illness. But any excess of ten pounds will tend to lessen the life span of an individual. For example, it has been estimated that an excess of twenty pounds at age forty increases the chances of mortality by 10 percent and at age fifty by 20 percent. As to distribution of weight, the pot-bellied type whose beltline bulge is greater than his chest in full expansion, is the poorest risk for a ripe old age.

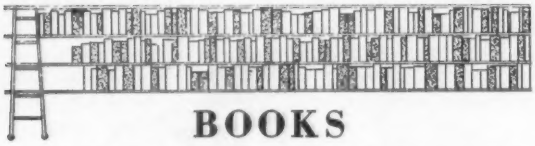
The nineteen fifties might well be characterized as the "low-calorie age." Magazines, newspapers, and books are full of "special diets," "7-day diets," and "wonder diets." The public has been properly awakened to the fact that the fat man is a poor risk against sickness and disease. His added weight is a definite liability in combating infections, especially those of the bronchial passage. The seriousness of excessive poundage is vividly illustrated by the fact that the death rate of overweight people from heart disease and cerebral hemorrhage is one and one-half times that of those who are underweight! Apoplexy also claims three times the number of obese people as lean ones and the mortality in kidney vascular disease is one and three-quarters times greater in the ranks of the bulging beltline brigade.

If the tendency toward varicosities is present, the man who stands on his feet long hours will be more disposed to have them if he is burdened with extra weight.

As further proof of the claim that "overweight shortens life," Metropolitan Life Insurance statisticians made a study of the mortality rates in two groups of overweight persons who subsequently reduced their weight. The results showed that the "expected" death rate, based upon the insurance com-




"OPEN YOUR MOUTH AND WE'LL SEE HOW THE WORLD'S BEEN TREATING YOU."



## BOOKS

Dental Mechanics for Students, by John Osborne, Ph.D., M.D.S., F.D.S., R.C.S. Published by John de Graff, Inc., 31 East 10th St., New York 3, N. Y. Fourth edition, 1956; 446 pages. Price $6.50

Practical Orthodontics, by George M. Anderson, D.D.S. Published by C. V. Mosby Co., St. Louis, Mo. Eighth edition, 1955; 702 pages; 719 illustrations; index. Price $17.50.

Oxygen Insufflation in Periodontal Diseases, by Harold K. Box, D.D.S. Published by Charles C. Thomas, Springfield, Ill. Ninety-four pages; 61 illustrations; index.

Accepted Dental Remedies, by American Dental Association, 222 East Superior St., Chicago, Ill. Publisher the same. Twenty-first edition, 1956; 206 pages; index. Price $2.00

Oral and Dental Diagnosis, by Kurt H. Thoma, D.M.D., and Hamilton B. G. Robinson, D.D.S., M.S. Published by W. B. Saunders Co., Philadelphia, Pa. Fourth edition, 1955; 449 pages; 928 illustrations, 55 in color. Price $10.50

pany's actuarial figures, was reduced 30 and 70 percent among the two groups who shed excessive weight.

Are you one of the estimated twenty-five million Americans who are overweight? (If you weigh 10 percent more than the computed weight for your age, build, and height to maintain good health, you are overweight.) Or are you one of the five million obese Americans who are 20 percent over the proper weight? If you are, now—right now—is a good time to resolve to do something about it!

With a serious overweight problem it is best to consult with your physician so that medication, if necessary, can be prescribed to curb your appetite. Doctor J. H. Barach, in a recent issue of *Modern Medicine,* said that appetite is probably the most important factor in obesity. Appetite may be stimulated by either mental or physical stimuli. The psychic causes for overeating have been duly exploited in recent years. Among the many and varied reasons for gorging oneself at the dinner table are a desire to punish oneself; to punish others; boredom; financial distress, and so forth. Some of the physical causes of a voracious appetite are glandular disease, faulty metabolism, or disease which causes abnormal retention of water in the tissues. However, the majority of people are overweight simply because they enjoy their food and eat too much.

To lose weight then, one has but to go on a low-calorie diet until the proper weight level is reached. When the required number of pounds have been shed, one should check weight regularly so that any slight gains can be coped with before excessive poundage is again accumulated. Dieting today is much easier than it was some years ago. The large and varied number of low-calorie foods now available—salt-free bread, canned fish, sugarless fruits, deserts, cake, and candy, and the artificial sweeteners, sucaryl and saccharin—do not demand as much self-restraint upon the dieter. Even low-calorie ice cream (100 gram portion containing 134 calories) is available in thirty-two States that do not have controlled dairy laws which regulate the proportion of sugar and butterfat in the product. (Maine, New Jersey, New York, Pennsylvania, and Virginia are among the sixteen States that do not permit the sale of sugar-free dietetic ice cream). With the elimination of the fatty foods, restriction of the starches, and the addition of the low-calorie foods one can maintain a satisfactory diet and lose from four to five pounds a week without starving. During any diet, the regular intake of vitamins and minerals are necessary to keep the body's resistance at a high level.

Drugs, such as amphetamine, propadrine, barbiturates, atropine, and so forth, although helpful in curbing "hunger pangs," should not be taken without consulting a physician.

Exercise is helpful to tone up tissues that have become flabby as weight rolls off. However, exercise is not a very effective means of removing excess poundage. For example, if you were to run at the rate of five miles an hour for about seven and a half hours, do you know how much fat you would burn up? Just about one pound!

Your task of keeping your weight down will be easier if you always bear in mind the fact that, for the fat man, death, not life, begins at forty. And the fatter the man, the slimmer are his chances for a long and healthy life.

446 Clinton Place
Newark 8, N. J.

"WHEN I CAN'T FIND ANYTHING WRONG WITH YOUR TEETH . . . . DO I CHARGE YOU?"

*Dental Wives:*

# Rules for Dental Wives

by Kay Lipke

Recently we heard of a dentist's wife who cast her ballot for a certain candidate on election day because she thought her husband would want her to vote for "someone with such beautiful teeth!"

Now that is carrying a devotion to a husband's profession a little too far, don't you think? However, a good many of us who are married to dentists are acutely aware of the ethics governing our husbands' profession, and accept the fact that a few of the restrictions and the rules pertain to us.

Like the blue-blooded ladies of the upper social register, whose lives are dictated by etiquette (do they have that kind any more?), we recognize that there are certain things wives of dentists should and should not do.

For one thing, it is not good form for us to talk too much about our husbands' profession. If you think this isn't difficult for a wife to remember, then you don't know women. As a sex we are not noted for conversational self-restraint, and it is especially difficult since we are so often forced to listen for hours to other wives relating their husbands' accomplishments.

The wife of an architect, for example, can tell her friends about her husband's coup in being awarded the contract for a big city building, and that is quite all right. Everyone is delighted with the news of his success.

The wife of an executive of a large transfer and moving concern can call attention to her husband's firm by saying gayly, when someone announces a move to a new home, "Be sure and remember our company when you move. I'll even bring you a box lunch on moving day. We aim to please."

The whole thing is handled with much laughter, and a new customer is added to the firm, with warm friendly feelings all around. However, a like remark by the wife of a dentist would be distinctly out of order.

Can you imagine a dental wife saying, "Why don't you go down and see my husband? He's a good dentist," when a chance acquaintance tells of her need for dentistry and her uncertainty of the right man to do the work? The majority of our husbands would disown us if we presumed to advertise them in such a manner.

Of course, we are grateful when someone present speaks up and does the recommending for us. We glow happily to hear kind words of praise for our individual husbands and, in answer to questions, we give the necessary information with as modest an air of reluctance as we can muster at the moment.

Now usually this restraint does not come naturally to us. It is the result of stern discipline. As a rule we are enthusiastic and outgiving by nature and enormously proud of our husbands. We think they are all doing a fine job in bettering the dental health of the community, and we would like to tell others all about it. However, we are also aware that we may hurt them more than we help if we "talk too much."

Another rule—and also restriction—of which we are conscious is the important business of being on time for appointments. Not just dental appointments, but all appointments everywhere.

Ah, me! Many a relaxed, happy-go-lucky girl, with no conception of time, has married a dentist and never been the same again. Being late for an appointment was not a major crime to many of us until we listened to our husbands relate the havoc played in a busy day's schedule by just one patient who strolled in an hour late or simply forgot to come at all.

The sulphuric intensity with which our husbands have expressed their opinion of women who have so little consideration for others has been indelibly impressed upon our consciousness for all time. As a consequence, we find ourselves breaking speed laws, and etching nervous wrinkles into our foreheads as we hurry across town to get to a given place on time. Soon we find ourselves with a reputation for promptness which we never can live down. We arrive at weddings before the church is opened, and at luncheons before the hostess has changed her clothes.

So you see, gentlemen of the dental profession, we dental wives sincerely do try to obey the rules of the game. Sometimes we succeed, sometimes we fail. However, one thing is sure: We certainly do not take the business of being dental wives lightly.

P. O. Box 350
Albany, N. Y.

**SAYS HER DENTIST**

O bless the lady patient,
Rare in this fair land,
Whose lipstick's left inside its case
Instead of on my hand!

Margaret Evelyn Singleton

***A good commercial dental laboratory:***

# An Asset to Your Practice

**by Rolland B. Moore, D.D.S.**

Sometime ago, a questionnaire was sent to several thousand representative dentists in small and large communities throughout the United States to determine how many of them were using the services of commercial dental laboratories in their denture work. The replies indicated that more than 90 percent of the dentists used commercial laboratories. One question asked was: "Do you set up your own trial plates and send them after try-in to a dental laboratory for processing and finishing?" Approximately 35 percent reported that they set up their own trial plates, but the others, or 65 percent, said they ran their own stone models and sent them with the wax bite to a laboratory, had the laboratory set up the trial plates and return them for the try-in, after which they, the dentists, sent them back to the laboratory for processing and finishing.

In the last twenty-five years the commercial dental laboratories have been putting out beautiful work. When you get your finished dentures, they are wonderful. There will not be a scratch on them, not a "washboard"—perfectly finished around the teeth and the case stippled. There is not one dentist in fifty who can do work as beautifully as a dental laboratory can do it. Why? Because a commercial dental laboratory, working for a hundred or a hundred and fifty dentists, will make that many dentures while a dentist, doing all of his own denture work, will make but one. I can tell in a minute whether a denture is a "homemade job" or one by a commercial dental laboratory. If "homemade," nine times out of ten scratches or washboards can be seen; it is not well polished; the space around the teeth is not well finished. Usually the denture is not of uniform thickness; in places it may be so thin one can see daylight through it. You can almost be sure there has been no stippling done to give the denture a lifelike appearance.

Of course, there are good, extra good, commercial dental laboratories—and there are poor ones too. When a dentist locates a good laboratory, he should stick with it instead of shopping around trying to save a few dollars. The good laboratory appreciates your business, doctor, and your loyalty. It will do all in its power to keep your business. You will get better service by being a regular customer. And don't forget to pay your laboratory bill each month. Your laboratory owner needs your money to help pay his heavy expenses. His profit is not large; it is much smaller than you expect.

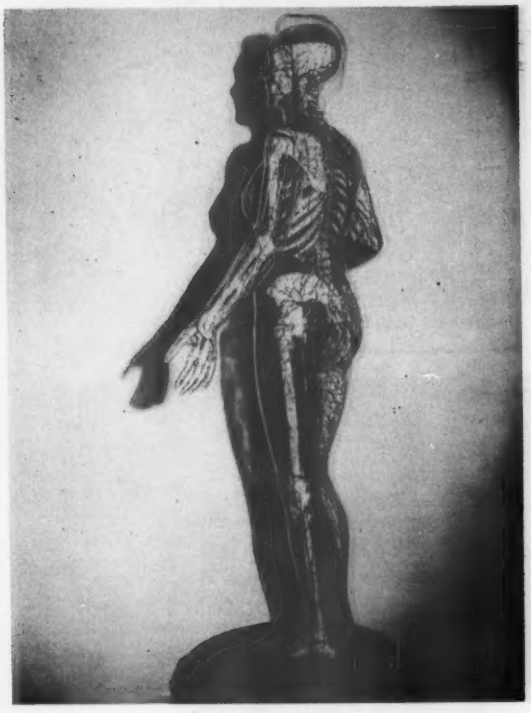
In sending in my denture cases to a dental laboratory, I mark the lip line on the wax bit. I am careful about seeing at the heel of the bite that the ridges are opposite to each other. If one is off to one side, it means the patient bit crooked or off to one side. I examine the anterior of the bite carefully to see that the patient did not bite forward with the lower jaw, as so many of them will do. One way one can tell is this: after the wax has been placed in the mouth and the patient told to close on it, place a finger on each side of the jaw about one and a half inches below the ears. If the patient bites forward, you can feel him do so. The muscles' strain can be plainly felt.

With the many different denture materials now on the market, a dentist doing all of his own denture work must carry too many kinds of material and he will have much money tied up. Not only must he carry many kinds of plastic but he will have an occasional case where vulcanite is wanted. Some patients are allergic to the resins. Thus, in addition to the different plastics, he must carry the different colors of vulcanite, too. Some patients will have read about Densene perhaps, or Lucitone, or Oryl, or Palatex, or Acrylic, and want one of them. If you carry a full line, you not only have to have the pink but the clear as well for clear palate jobs. Then, too, you have to have on hand quite a stock of denture teeth to take care of all classes of cases that come to you. You may have one mold and shade you will use but once in six months, yet you must tie up your money in it. When you look over your stock of denture material and the sets of 14's and 28's, you find your investment heavier than you thought.

A commercial dental laboratory carries all that in stock for you. Suppose you request that a certain material be used. An ethical laboratory will use exactly what you ask for. Now suppose further that you are doing all of your own laboratory work, making all your own dentures, and you have a patient who wants a Lucitone denture. When you get ready

**DENTIST IN THE NEWS**

**The artist put teeth into this painting—real teeth. Besides the enamel fixtures, there are dental instruments. The painter, David Dolot, is a dentist. He calls the painting "Toothy Eve." The picture attracted much attention at the annual exposition of works of art by physicians, dentists, chemists, and veterinarians in Paris. (Wide World photo)**



**THE GLASS WOMAN**

**A talking transparent woman who gives a dramatic visual explanation of human physiology is at Boston's Museum of Science. The life-size woman has a Plexiglas "skin" and an aluminum skeleton. As she tells the story of how her body functions, each of her internal organs is illuminated. A massive console controls the voice, lighting, and movements of the model, which is five-feet, seven inches tall and weighs only 98 pounds. (Authenticated News photo)**

to process the case, you find your stock of Lucitone short. You use something else, believing it is just as good. But you have substituted, and you can be sued for breach of contract.

There are not many dentists who can afford to take their chair-time to work in their laboratories on dentures. Their chair-time is much too profitable.

There is one phase of denture work a dentist should do in his own laboratory and that is repair work, even though the money received for it is small. Repairing a denture quickly creates much good-will. Some dentists send all repair cases to a commercial dental laboratory. This forces the patient to be without his denture for some time. Obviously this does not inspire kindly feelings in the patient.

But whether or not you do your own repair work, a good, efficient dental commercial laboratory can save you time and money, doctor. Their personnel are highly trained to construct your cases in the most exacting techniques. Many times you can avoid trouble by consulting them on study models before starting a case. For example, I had such a case recently. I was not able to set a fee. I discussed the work with my laboratory and got their charge. I was able to do the work at a lower fee than I had thought. My patient benefited and so did I. A good commercial dental laboratory is an asset to your practice, doctor.

Box 237
Allerton, Iowa

## EULOGY IN A COUNTRY CHURCHYARD

Mail-order heraldry, high-octane power,
Mink stoles and tax returns and what we save,
In the long run will go a trifle sour—
Only alloy fillings can survive the grave.

Frank M. Arouet

# Keeping Those Tee

Text by Theodore Katz, D.D.S. and Haro
Photos by

Examining the patient.

Making a mold of the teeth.

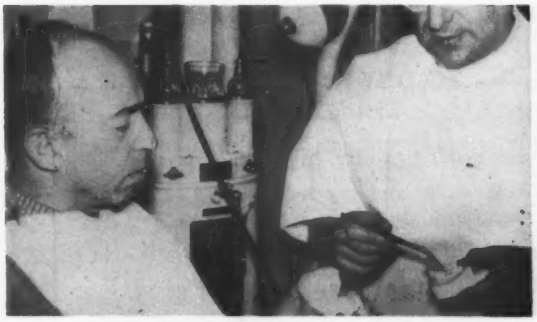
Explaining the mold to the patient.

A half a century ago, little Herman Ruttner received a present of his own personal toothbrush and also a tube of toothpaste. For days Herman was the envy of everyone in his particular neighborhood. As he related the story years later to us, "There were kids who didn't believe it was my own toothbrush to be used only by myself. Some figured I was going to share it with the rest of my family. Some thought there must be something wrong with me to want to clean my teeth. With pride, twice a day I literally scrubbed my teeth and part of the gums. The only trouble was that I used a vigorous horizontal movement."

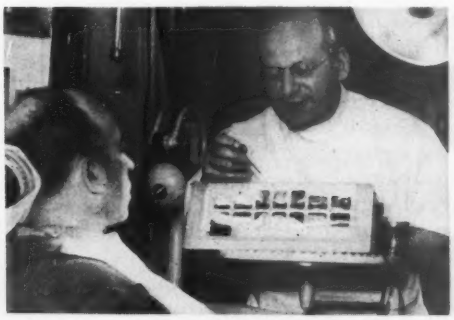
And as a result of the injury to the gums and teeth, Herman Ruttner has ever since been in and out of dental chairs. In that half century the toothbrush and either toothpaste or tooth powder have become part of our American standard of living. We submit that the time has come to re-examine carefully the concept of the use of the toothbrush by individuals. What we feel is that, in light of our advanced dental knowledge, instructions for the care of teeth and gums must be individualized by the dentist after he has thoroughly examined his patient's mouth. To go a step further, we no longer think that in the present day it is even sound and safe for a teacher in school to give mass instruction in the "proper use of the toothbrush." As the concept of preventive dentistry spreads, and the patient age level begins between the age of two and one-half and three and one-half, this function must be in the hands of the dentist.

## Making Model of Mouth

We start with a patient, William Bedford, age forty. He has used a toothbrush but never has studied the inside of his own mouth. To prepare a program of sound oral hygienic ~~care this is what must~~ be done. A model is made of his upper and lower teeth, and full mouth X-rays should be taken. Then, for the first time, he can actually see and understand why some of the techniques he was following with his tooth-



Demonstrating what the toothbrush should do.



Interpreting X-rays.

The patient stu

# hose Teeth Clean

tz, D.D.S. and Harold Gluck, Ph.D.
Photos by

rush weren't giving the desired results. There was too much ressure on the left lower side of his mouth. In fact, a harder oothbrush was needed for this particular case. He never ached the last two teeth in his upper right side of the jaw. nd there was food impacting between two teeth that uldn't be reached by the toothbrush itself. The occlusion ould be corrected and dental floss used after meals.

## Use of Dental Floss

Then the proper use of dental floss must be shown on the ual model, and in the mouth proper. The gum margins n be injured by too much pressure exerted on the dental ss. If there are fillings or inlays, they must be rechecked r overhangs, which can catch on to the dental floss. The per use of Stim-U-Dents instead of the toothpick can also explained, for the necessary cases.

If there is a fixed bridge, the method of cleaning under the ntic must be thoroughly explained.

## Massage of Gums

The proper massaging of gums, so as to help instead of in-ing the gums, must also be taught. As more commercial oducts appear on the market, each must be analyzed and en measured again in terms of the particular patient. In e case, a simple massage cup helped. In another case, a inge bulb filled with warm salt water was directed between e teeth.

When the patient has been given a set of techniques to p his or her teeth clean, there must be regular visits to e dentist to check up on the efficiency of these methods.

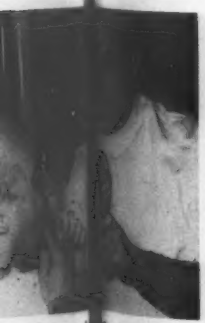
## Individual Analysis

The case of Daniel Wilbert, a patient, will illustrate how ividual analysis must be made of each particular situation.

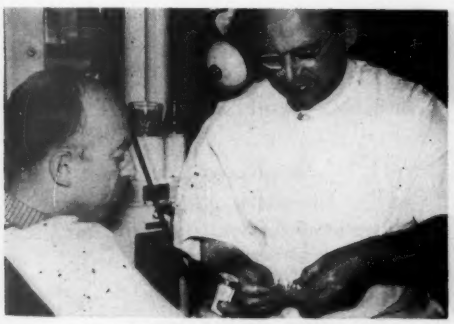
Demonstrating on a bridge.

Using a syringe.

Patient employs Stim-U-Dents.



patient uses



Showing use of dental floss.

Massaging the gums.

His teeth had been checked and cleaned. Then, at the end of three weeks, he returned with a complaint. He had looked into the mirror and noticed that he was getting an accumulation of tartar on the back of his two lower front centrals.

An examination of the model showed that what he actually needed was something like a scaler to get at that tartar.

In another case, the spaced examination plus a diagnostic talk produced this information: The dental patient was a mouth-breather. Tongue and teeth acquired a heavy accumulation during the night. It was suggested that the dental patient visit his family physician to see if a physical obstruction were present in the nose. The examination showed no physical obstruction. In view of this, it was necessary to re-educate the patient so that he could breathe properly. It took time and energy but it was worth the results.

### Five Times to Brush

It is submitted that insofar as brushing the teeth itself is concerned, the proper times within a day consist of:

Upon arising
After breakfast
After lunch
After dinner
Before retiring

That may mean having an extra toothbrush in a container at the place of business. In addition, the particular case should also require rinsing and the use of dental floss.

### Also Tell the Patient

The patient should also be told:

A clean tooth can decay but it wouldn't be the result of the accumulation of food and other debris as a breeding place for the bacteria.

That he may have to give up habits which, though enjoyable, interfere with having clean teeth. We refer here to excessive smoking, chewing tobacco, and the excessive consumption of candy, cakes, and sweetened beverages.

That a proper hygienic program for clean teeth will produce clean teeth but there may be other physical factors which can affect the gums and teeth—such as physical condition, the excessive use of carbohydrates, and bad habits such as biting on pencils, pipes, and eyeglass frames.

Harold Gluck
2939 Grand Concourse
Bronx 68, N. Y.

## CAUSE FOR CELEBRATION

When I was a boy,
The height of my joy
Was the Fourth of July celebration!
Paroxysms of glee
Ascended on me
Because of the State of the Nation!

But it took several men
(John, Thomas, and Ben) *,
Declaration and Revolution
To make me get out
And frolic and shout
For our glorious Constitution.

Now I still extoll George
(Also Valley Forge),
Yet had I less notable reason,
I could still celebrate
At the regular fete
This agreeable firecracker season.

The occasion is one
For fireworks and fun,
For my patients are all in attendance
And I, too, can declare,
Of office and chair,
Full twenty-four hour independence!

* Adams, Jefferson, Franklin.

Helen Harrington

# Oral Cancer

by Joseph Murray, D.D.S.

## Part 7

## BIOPSY

At the present time an unequivical diagnosis of cancer, even in advanced cases, can be made only by microscopic examination of the lesion. The study of such a tissue specimen is known as the biopsy.

Most likely, the dental practitioner will be the first to discover the oral lesion, therefore it lies within his domain to remove the questionable tissue and send it for histologic examination to a qualified pathologist.

Ordinarily a small biting or punch forceps should be used. Other excellent methods, usually available to the dentist, are the use of a sharp scalpel for excising the specimen and, if necessary, the substitution of a small cup-shaped, dental rongeur forceps for the procedure. Doctor Hayes Martin suggests that a specimen of 4 or 5mm. should be carefully taken so that crushing of tissue is avoided.

The specimen should be placed immediately in a fixative solution containing ethyl alcohol, 70 percent, or formalin, preferably a 10 percent solution of the latter, and labeled with the patient's name and the anatomic site of the growth. It has been suggested that the specimen bottle be of wide-mouth design and that sufficient fixative be used to equal at least ten times the volume of the tissue to be examined.

A small, superficial lesion should be totally excised together with a definite zone of normal tissue along its border. When submitting an abscessed tooth for microscopic examination, it is a commendable practice, if possible, to send the entire tooth, including the attached cystic, granulation tissue or growth.

If the size or location of the neoplasm does not warrant complete removal, then a triangular incision should be made at the edge of the growth to include a portion of the normal tissue, advise Doctors J. L. Bernier and R. W. Tiecke.

Biopsy usually entails little danger, excepting the case of suspected melanoma, which should be removed completely to avoid its spread. The risk of infection, hemorrhage or metastasis of the tumor is minimal. A representative area should be chosen for biopsy, and a narrow and deep specimen rather than a broad but shallow piece of tissue should be taken.

It is Doctor S. G. Castigliano's opinion that normal tissue is not a requisite for a good biopsy and that when a choice exists, sites to be avoided are those nearest bone, cartilage or teeth, near large blood vessels, where the tumor bed is shallowest, and areas of necrosis. He states that sufficient depth of the actively growing portion of the tumor, which is usually near the border of the lesion, near normal tissue, should be included.

This noted clinician feels that normal tissue should be avoided whenever possible because it breaks the natural barrier which the body is attempting to build as a defense against the invading carcinoma. Besides, it prolongs healing following irradiation and increases cosmetic liability. Should normal tissue be taken, then electrocoagulation of the wound is advisable to seal off the lymphatics.

### Obtaining a Biopsy

Doctor Castigliano points out that sharp dissection with the cold knife or scalpel is as good a method as any for obtaining a biopsy. His technique is as follows:

Four small incisions are made to complete a small square. The knife is then laid on its side and placed in the depths of the square incision, which is between 4 and 5mm. deep or deeper, depending on the characteristics of the growth. With a flat cutting motion, the base of the cube of tissue is cut, picked up gently without squeezing or crushing and placed in the preservative.

Some pathologists will make a diagnosis on the basis of an aspiration biopsy, but its usefulness is apparently limited to swellings of the neck, an indication of lymph node metastasis. In such cases, quite often the puncturing needle will miss the cancerous lesion. Moreover, the malignant material is frequently mixed with other tissues and fluid, making a diagnosis more difficult.

Sometimes, additional specimens should be prepared to check the clinical diagnosis of suspected cancer. A "negative" biopsy has been defined as one which should be repeated.

Doctors B. G. Sarnat and Isaac Schour have suggested that the microscopic examination of a biopsy specimen should help to answer the following questions: Is the lesion a neoplasm? Is it benign or malignant? What type of tumor is it? What is the probable degree of malignancy? What is the probable radiosensitivity?

Epidermoid carcinoma has been classified into four grades of relative malignancy, which determine the prognosis—the more malignant the lesion, the more undifferentiated are the cells; the less differentiated the cells, the more radiosensitive the tumor. Thus, high radiosensitivity and greater malignancy frequently go together.

It is needless to say that antiseptic precautions should be taken in preparing the mucous membrane

## INTERNATIONAL DENTISTS

Above, left to right: Past president of the Federation Dentaire Internationale, Doctor Oren A. Oliver, and president, Doctor Albert Joachim of Brussels. At extreme right: Dean Harry Lyons of the School of Dentistry, Medical College of Virginia, educator, scientist, and speaker of the House of Delegates, American Dental Association. (Authenticated News photo)

and carrying out the surgical technique for the biopsy. As a rule, local anesthesia, wide of the tumor—conductive or general anesthesia, depending upon the surgeon's preference—can be employed. It is of vital importance never to infiltrate directly into a lesion or to traumatize the growth by compression, before or after removing the specimen. The tissue to be examined should be placed immediately in the fixative (10 percent formalin) and not on a gauze sponge, which is too often absentmindedly discarded by the surgeon, together with the biopsy material.

Rather than delay precious time, time that could be devoted to cure the patient, the general dental practitioner should take more tissue specimens of intraoral lesions than he has done in the past. He should familiarize himself with the proper procedure through postgraduate study, if necessary.

Certainly there is no contraindication to sending a patient with a suspicious growth to an oral surgeon or to a recognized tumor clinic, for consultation. Obviously, such a plan is highly desirable. However, the patient must be followed up relentlessly in such instances, to determine if the biopsy has been taken and treatment planned for or instituted.

Finally, it is quite obvious that the submission of most microscopic specimens will elicit a report of nonmalignancy from the pathologist, which is as it should be. But such favorable tissue diagnosis should not induce complacency. Rather, eternal vigilance, in the form of more biopsies, must prevail.

**Next Month Part 8**
**The Four Stages of Oral Cancer**

1358 46th Street
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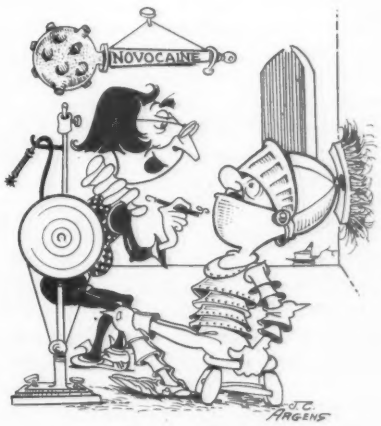
**BIBLIOGRAPHY**

1. Bernier, J. L. and Tiecke, R. W., "The Biopsy," *J. Oral Surg.* 8: 342 (October) 1950.
2. Castigliano, S. G., "Oral Cancer," reprinted from *Oral Medicine*, by Lester W. Burket, J. B. Lippincott Co., Philadelphia: 1952.
3. Martin, Hayes, *Cancer of the Head and Neck*, American Cancer Society, New York: 1953.
4. Patterson, W. R., "The Role of the Dentist in the Detection and Diagnosis of Oral Malignancies," *J. A. D. A.* 48: 421-424 (April) 1954.
5. Robinson, H. B. G., "Diagnosis of Cancer of the Oral Mucosa," *Oral Surg. Oral Med. and Oral Path.* 4:985 (August) 1951.
6. Sarnat, B. G. and Schour, Isaac, *Oral and Facial Cancer*, Year Book Publishers, Chicago: 1950.
7. Thoma, K. H., *Oral Pathology*, C. V. Mosby Co., St. Louis: 1944.




"WIDER . . . SIR LEADPANTS!"

# ANGLES AND IMPRESSIONS

### Why Fight Oral Hygiene? Enjoy It!

About 2,000 years ago, Ovid advised that the "teeth be washed every morning," and, long before, during the eighth century B. C., the Assyrians considered it wise to cleanse the teeth regularly to rid them of the "gnawing worms." So whether conveyed to the mouth by a miniature whisk broom, as was the custom of the ancient Arabians, or by the modern toothbrush, whose parent form was first introduced to the Western World in 1790, the dentifrice is probably as old as civilization itself.

In recent years, however, in a frantic effort to combat caries (and increase sales), the public has been deluged with tooth cleansers endowed with "scientifically proven" miracle ingredients. Toothpastes are no longer virginally pure white as they glide out of their blocked tin encasements. Dentifrices have been ammoniated, fluoridated, bicarbonated, pencillinated, chlorophylled, enzymized, and homogenized. Yet, none of their claims have been endorsed by the sober investigation of the A. D. A. Council. Finally, what would seem like a supreme bid toward more exquisite living in a "decaydent" society comes "Whiskey Flavored Tooth Paste." No fooling. The Greenland Studios of Pittsburgh advertises a dentifrice with three tasty flavors: Scotch, Rye or Bourbon. However, they make no claims toward fighting caries, but they do appeal to the palate. In their ad they say: "Why fight oral hygiene—enjoy it! Here's real he-man tooth paste that's the best argument yet for brushing teeth three times a day." What an era of oral hygiene this ushers in! Just imagine, no rinsing for the man who likes his Scotch straight. And can you just picture a couple toasting each other in the bathroom with raised toothbrushes? Get the monster size tube with the miniature olives in it if you prefer a Martini flavor! Pardon me, while I go out and get a case of toothpaste.

### Dear Doctor

Juliet Lowell, who has made it a practice to collect unintentionally funny letters addressed to famous people, business concerns, and government agencies and set them down in some humorous books, recently put out a book entitled *Dear Doctor*. It is chock-full of comic correspondences addressed to the medical and dental professions. Here are a few samples sent to dentists:

Dear Dr._____

My 60-year-old father is losing his teeth and now the same thing is happening to my 6-year-old daughter.

Could she be catching this from him?

Mrs. John D_____

Dear Dr._____

I think I've got a small cavity in one of my teeth. Please try to keep your bill same size.

Lester D_____

Dear Dr._____

So why did you send me a bill?

I took the first appointment in the morning because your nurse told me that the first appointment was free.

Jacob J_____

Useless Information Dept.: Although an English earl is credited with inventing the sandwich, the ancient Aztec Indians were fond of four-decker sandwiches consisting of frog eggs on bread. However, the chances are that you'll never see it on any menu, because the name is a printer's nightmare. It's called "totanquitlaxacallitlaqueelpachalli."

### Report on Dentistry's Greatest Developments

Some time ago we asked: What are the ten greatest advances or developments in dentistry? Among the responses we received, the following seemed to be most popular:

(1) Discovery of general and local anesthesia.
(2) Development of the X-ray machine.
(3) The introduction of the antibiotics.
(4) Development of the acrylic materials.
(5) Development of the carbide burs, diamond stones and high speed handpiece and engine.
(6) Development of the casting technique for operative and prosthetic dentistry.
(7) Development of the silver alloys.
(8) Advances made in sterilization and antiseptic techniques.
(9) Development of more accurate impression materials.
(10) Advancement in patient-education methods —visual aids, photography, etc.

No effort has been made to put these in order of importance but it is interesting to note that at least six were embodied in every list presented.

FOR LIVING

Part 5:

# Public Health Service Dentist

by Joseph George Strack

Every dentist has a professional stake in the programs being carried out by the Division of Dental Public Health, Public Health Service, U. S. Department of Health, Education, and Welfare.

Here's why: those programs involve dental caries, periodontal disease, dental care services, utilization of auxiliary personnel, and many other matters—all of direct concern to the practicing dentist and of interest to health workers and the general public as well. Of special interest to dentists, however, are such Division projects as those on the use of dental assistants and hygienists, topical fluoride applications, fluoridation of public water supplies, and local dental health programs.

Doctor Thomas L. Hagan, Chief of the Division, makes the whole complex of operations come alive and make sense:

"We do five things. We conduct studies that will provide more information about dental diseases and conditions. We develop and demonstrate practical applications of the findings of fundamental research. We assist health departments in building sound dental health programs. And we promote measures for improving dental health. Briefly, for the sake of emphasis, we study; we develop; we demonstrate; we assist; and we promote."

The Division is one of the smallest units in the famed Public Health Service, with only a few men on the headquarters staff and only a small field force in seven of the Department's nine regional offices. But you'd never know it from all the studying, developing, demonstrating, assisting, and promoting they have under way at any given time. For example:

Take studying: the Division's field studies to provide data on dental diseases and conditions help to lay the foundation upon which other projects are built. Out of such studies will come many of the dental health programs of tomorrow. Also, they help in developing practical measures for applying the findings of basic research and include many facets of dental health. That is why we should keep our attention on such projects as these:

The pioneer fluoridation study at Grand Rapids, Michigan. It is providing additional data on the effectiveness of this public health measure in reducing dental caries, on the safety of the procedure, and on its practicability.

Studies concerned with technical procedures used in adjusting the fluoride content of water supplies. These studies deal with methods of feeding the compound, the use of cheaper compounds which have not proven practical in the past, simpler and more accurate methods of determining the fluoride content of water, and

improved techniques for removing the excessive amounts of fluoride naturally present in some water supplies.

Projects concerned with the dental care needs of children. In these projects, public health dentists examine children and determine their initial needs. The number of decayed, missing, and filled teeth in each group is recorded. Then the amount of care required on an annual and accumulated basis is determined. The investigators are seeking the answer to this question: What is the difference in dental care needs when the child has his dental work attended to on a regular annual basis and on the basis of widely spaced visits to the dentist? These studies have other objectives: (1) to provide data that can be used in developing and improving dental operating techniques and (2) the more effective use of dental assistants.

Another group of studies are focused upon new topical caries control agents. In one of these projects, dentists, in cooperation with schools, are testing the caries preventive effectiveness of different kinds of mouth washes.

In the area of developing and demonstrating, the Division is engaged in another group of varied, interesting tasks. Some of them are:

An investigation is designed to develop realistic indices on the prevalence and incidence of periodontal conditions and malocclusion. Without such measuring tools as prevalence and incidence, public health workers have not been able fully to understand the characteristics of these diseases and conditions as they occur in population groups, the Division points out.

Another project is tied to the problem of there being "no reportable dental diseases, no data to describe precisely the prevalence of all dental diseases." This project concerns the development of adequate data to describe dental morbidity and dental health needs on a regional and national basis.

"Obviously, studies are only a part of the job," Doctor Hagan says. "They, along with basic research—which the Division does not engage in—provide the grist for the mill of demonstration projects." He points out that the Grand Rapids project is both a study and a demonstration of fluoridation. "It is demonstrating how sodium fluoride is added to a water supply, how the fluoride content of the water is controlled, and the fact that controlled fluoridation produced the same reductions in dental caries as was obtained through the use of naturally fluoridated water. The topical fluoride program of several years back also was essentially a demonstration program in which teams of dentists and hygienists demonstrated the technique of applying a solution of sodium fluoride to the teeth. The Division's two defluoridation projects are demonstrating that excessive amounts of fluoride can be removed from water supplies, even though at present the procedure is too costly for widespread use."

**One of the school clinics used in the five-year Richmond, Indiana, study of dental care services for children. In this study, 5,523 children between five and sixteen years of age were examined and 4,569 requested and received dental treatment. Before receiving treatment, only 17 percent of the children had any permanent teeth filled. This figure rose to more than 52 percent at the start of the second treatment twenty-four months later. The Richmond study also developed procedures for the more effective utilization of dental assistants. (PHS photos)**

Study projects often show the need for developmental projects:

Studies of methods for determining the fluoride content of water supplies showed a need for a simple, accurate test. The Division developed such a test.

Another study project indicated that a procedure was needed for applying sodium fluoride to the teeth of children on a group basis so that costs could be held to a minimum. From a subsequent Division developmental project came the multiple chair procedure which, by utilizing the drying period, enables the hygienist to treat four children at one time, thus increasing her efficiency and reducing costs.

Another project was that concerned with the development of the technique for making topical fluoride applications. This technique was developed partly on the basis of studies, one of

which showed that a prophylaxis before the first application in a series increased the effectiveness by approximately a half.

We have seen some examples of the Division's functions of studying, developing, and demonstrating. It does a great deal of assisting, too—primarily in helping health departments to improve the dental health of their States, counties, and local communities. This program is carried out largely through the regional offices of the Department of Health, Education, and Welfare, usually with teams consisting of a dental consultant, an assistant dentist, a program representative, and a fluoridation engineer. The teams work closely with dental directors in State health departments. Doctor Hagen points out that part of their job is to keep up-to-date on research and field studies, to keep posted on dental programs in health departments, and to become so thoroughly familiar with the operation and administration of local and State projects that they can bring to any one State the experience of all other States with similar programs.

Here again a wide variety of activities may be involved, including the following:

Planning and conducting dental health surveys.
Evaluating community programs.
Preparing State dental programs plans.
Presenting information on fluoridation.
Developing oral cancer detection programs.
Formulating school dental health plans.
Encouraging registration of cleft palate and hair lip cases.
Establishing State regulations on fluoridation.
Encouraging topical fluoride programs in rural areas.
Training personnel.

The assistance program is not limited to States and localities, however. The Division also works with other Federal agencies and national organizations, including the Civil Defense Administration, the Veterans Administration, the Department of Defense, the Department of Agriculture, and the American Dental Association. The Division benefits, of course, from all these contacts and wide experience. The program is thus a two-way street, for many State dental directors and others contribute the fruits of their experience and their professional know-how toward the solution of problems the Division consultant faces in other States and communities.

The Division's job of promotion is primarily an educational and informational one, not a high-pressure selling chore. It provides information to health departments, professional societies, lay organizations, and the general public. For example:

> In the field of fluoridation, it conducts studies, demonstrations, and assistance programs. In "promoting" fluoridation, "it brings the facts about the dental, medical, chemical, and engineering aspects of this public health measure to the attention of health departments and others." Doctor Hagan puts it this way: "The Division says, in effect: 'Here are the facts that have grown out of almost fifty years of research and field studies. You as a taxpayer have paid for much of this research and you are entitled to know the results. It's up to your community to decide whether or not it wants fluoridation, just as it's up to your town to decide what it wants to do about its schools or streets.' "

And Doctor Hagan sums it up as follows:

"This five-pronged program of the Division—studying, developing, demonstrating, assisting, and promoting—provides a follow-through from the point at which fundamental research stops to the final application of research by the individual family or community. The results of this five-pronged attack on dental diseases and conditions have demonstrated that it is sound. There is every reason to believe that it will continue to improve the dental health of our people."

**Next Month—Part 6**

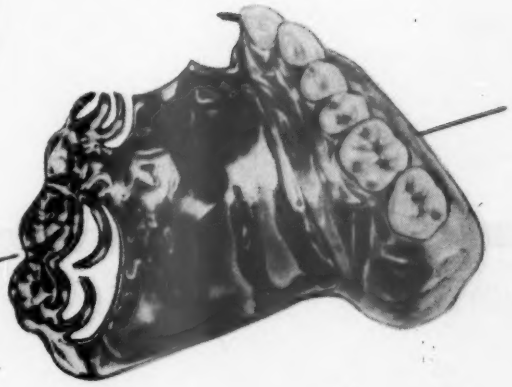
## BRIEF BIOGRAPHY OF A DENTAL LEADER

Doctor Thomas L. Hagan, Chief of the Division of Dental Public Health, United States Public Health Service, joined the Service in 1929 and has been a member of the Commissioned Corps since 1930.

During his first 14 years in the Public Health Service, Doctor Hagan served as dental clinician in PHS hospitals in Massachusetts, New York, Pennsylvania, and Kentucky. He was dental consultant in Atlanta and New Orleans from 1943 to 1950, and Assistant Chief of the Division of Dental Public Health from 1950 until 1952, when he became Chief.

He is a graduate of the Georgetown University School of Dentistry and received his master's degree in public health at the University of Michigan. He is a member of the American Dental Association, the American Public Health Association, and the American Association of Public Health Dentists.

# *The* TICONIUM *Casting of the Month*



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